HONEYWELL
REMOTE RAIN GAUGE
For Professional Weather Station TE923W

TS906
USER MANUAL

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Introduction

Thank you for selecting the Honeywell remote rain gauge TS906.This product is a part of the Professional Weather Station TE923W. It measures rainfall amount and transmits data to a TE923WD (main display unit).

Note: In order to display the rainfall amount and related items, you must own a main display unit (TE923WD) for the Professional Weather Station TE923W.

In this package you will find:

One Rain Gauge (remote rain sensor/transmitter) (TS906)

Mounting Hardware

One User Manual

Standard Package Contents

Picture	Components
	Rain Gauge consists of: Funnel shaped top with battery compartment Rain Gauge bucket Bucket see-saw mechanism Protective screen
4 screws for securing rain gauge to the flat surface	**Mounting hardware**

Installation

All data measured by the rain gauge is transmitted to the main unit wirelessly, with the operating range up to 100 feet (30 meters) in the open area.

Remote rain gauge must be placed outdoors to measure precipitation.

Note: It is critical to power up and test communication between the remote rain gauge and the main unit **BEFORE** permanently mounting it outside.

Before you begin

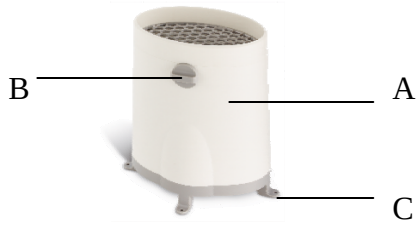
- We recommend using alkaline batteries for the remote rain gauge when temperatures are above 32°F (0°C) and lithium batteries when temperatures are below 32°F (0°C).
- Avoid using rechargeable batteries. (Rechargeable batteries cannot maintain correct power requirements).
- Insert batteries before first use, matching the polarity in the battery compartment
- During an initial setup, place the main unit close to the remote rain gauge.

- After reception is established (the rain readings will appear on the main unit's display), position the remote rain gauge and the main unit within the effective transmission range of 100 feet (30 meters). Ideally it should be placed within the line of sight of the main unit.
- Transmission range may be affected by trees, metal structures and electronic appliances.
- The effective operating range may be influenced by the surrounding building materials and how the receiver (main unit) and transmitter (rain gauge) are positioned.
- Place the remote rain gauge so that it faces the main unit (receiver), minimizing obstructions such as doors, walls and furniture.

IMPORTANT: Make sure that the remote rain gauge is easily accessible for cleaning and maintenance.
We recommend cleaning the remote rain gauge periodically, as the dirt and debris may affect its accuracy.

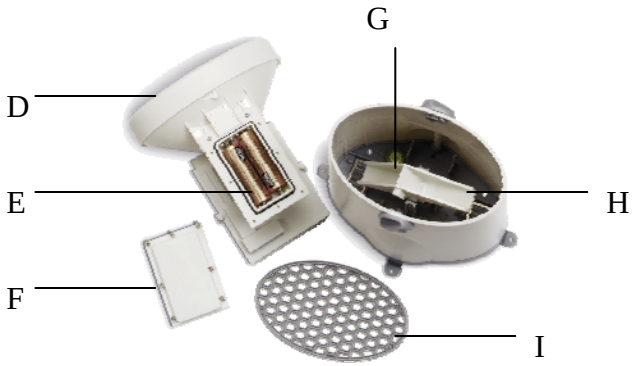
Features

- Precipitation measurement
- Remote rainfall data transmission to the main unit via 433 MHz signal
- 100 feet (30 meters) transmission range without interference
- Built-in installation level
- Non-corrosive protective screen



A. Rain gauge bucket
Holds all rain gauge components
B. Knob
Secures the top on the rain gauge bucket
C. Rain gauge bucket feet
Allows securing the rain gauge on its place

C



H

D. Funnel-shaped top with battery compartment
Contains battery compartment and rainfall counting electronics
E. Battery compartment
Holds two AA-size batteries
F. Screws
Secure battery compartment cover
G. Built-in leveler
Allows leveling rain gauge on the surface
H. Bucket see-saw mechanism
Collects the rainfall in one of its containers and self-empties once full
I. Protective screen
Protects the rain gauge funnel from debris

Battery installation

- Unlock the funnel-shaped top on the rain gauge by turning both knobs on the sides in an anti-clockwise direction.
- Remove the funnel-shaped top lifting it off the rain gauge bucket.
- Remove 7 small screws from the battery compartment cover using a small Phillips screwdriver
- Insert 2 “AA” size alkaline batteries (not included), matching the polarities as shown in the battery compartment.
- Replace the battery compartment door and secure the screws.
- Insert the funnel-shaped top into the rain gauge bucket and secure it into place by turning the knobs clockwise.
- Press **DOWN** button either on the main unit control panel or handheld remote control. The rain reading (usually 0.00) will appear in the rain window of TE923W main unit display, instead of “ - - -“. Make sure you are aware that the rain gauge transmission interval is 183 seconds, so the reading will not appear

right the way.

Mounting

- Make sure that the rain gauge bucket is level – check if the ball bearing inside the bucket is at the midpoint of the leveler.
- Place the protective screen over the top to protect the rain gauge from the debris.
- Mount the rain gauge in place using mounting hardware provided.
- Make sure that the rain gauge is in open area where precipitation falls directly into the gauge's bucket, ideally 2-3 feet above the ground.

Placement tips

- The rain gauge should be placed in an open area away from the walls, fences, trees and other coverings which may reduce the amount of rain falling into the bucket. Additionally, trees and rooftops may be sources of pollen and debris.
- To avoid the rain shadow effects, place the rain gauge horizontally, on the distance corresponding to two to four times the height of any nearby obstruction.
- It is important that excess rain can flow freely away from the rain gauge.

Operation

The current and historical rainfall data is indicated in the rain window of the TE923W main unit display.

The main unit records the total amount of the rainfall for the last hour, 24 hours, past day, past week and the past month. The rainfall can be displayed in mm or inches.

There is a daily rainfall alert that can be programmed in the unit if the daily rainfall exceeds a pre-programmed limit. It also displays the remote rain gauge battery status.

To access rain mode from the main unit press **UP** or **DOWN** until the **RAIN** icon RAIN on the display starts flashing. To access rain mode from the handheld remote control press RAIN.

Viewing Rain Statistics

In the Rain Mode, press either **SET** or **MEMORY** button to recall a rain statistics for the past hour, past 24 hours, yesterday, past week or past month.

Tip: For the rain rate estimate the **Last Hour** rainfall value is understood as “inch/hr” or “mm/hr”.

Resetting the Rainfall Statistics Memory

In the Rain Mode, press and hold **MEMORY** to reset all rainfall statistics.

Setting Units for the Rain Display in inches or mm

In the Rain Mode, press and hold **SET** button to toggle rainfall data units between mm and inches.

Enabling or Disabling the Daily Rainfall Alert

- In the Rain Mode press the **ALARM/CHART** to display either the current rainfall statistics or the daily rainfall alert with “**ALARM HI**” displayed.
- If the alert is disabled, the “**OFF**” will be displayed; otherwise the rainfall alert value will be shown.
- When the rainfall alert is displayed, press the **UP** or **DOWN** to enable or disable it.

Setting up the Daily Rainfall Alert

- In the Rain Mode, press **ALARM/CHART** to display the rainfall alert.
- Press and hold **ALARM/CHART** until the rainfall alert “**ALARM HI**” will flash.
- Set the desired value for the Rainfall Alert by using the **UP** or **DOWN**. Press and hold either button for fast digits advance.
- Press **ALARM/CHART** to confirm selection and the unit will return to the rainfall alert display.

Disabling the Daily Rainfall Alert

In the Daily Rainfall Alert Mode press the **ALARM/CHART** to disable the alert.

Maintenance

Changing Batteries

The battery status of the rain gauge is checked every hour. If the low battery indicator lights up, replace the batteries in the rain gauge following the setup instructions:

- When the batteries are properly installed, the remote rain gauge will resume sending signals to the main unit.
- To enforce an immediate remote rain gauge signals search, press and hold **DOWN** on the main unit.

Cleaning

Checking and cleaning the rain sensor in a timely manner will maintain an accuracy of the precipitation measurements.

- Detach the protective screen and lid.
- Clean with soapy water and a damp cloth, removing dirt, leaves or debris

- Clean small holes and parts with Q-tips or pipe-cleaner.
- Watch out for spiders or insects that might have crawled into the funnel.
- Clean the swinging mechanism with a damp cloth.

Troubleshooting

Q: The display shows dashes "---" for rain.

A: The display will show "- - -" when the wireless connection with the rain gauge is lost for 30 minutes.

Check or replace the batteries in the rain gauge. Then press and hold **DOWN** on the main unit or handheld remote to enforce a search for all remote signals.

If this does not work, check the wireless transmission path from the rain gauge to the main unit and change its location if necessary.

Although wireless signals can pass through solid objects and walls, the rain gauge should ideally be within the line of sight of the main unit.

The following may be the cause of reception problems:

- The remote rain gauge and a main unit are too far from each other.
- The signal shielding materials, such as metal surfaces, concrete walls or dense vegetation, are in the path of transmission.
- There is interference from the wireless devices (such as cordless phones, radio headsets and baby listening devices) and electronic appliances.

PRECAUTIONS

This product is engineered to give you years of satisfactory service if handled carefully. Here are a few precautions:

- Do not immerse the units in water.
- Do not clean the units with abrasive or corrosive materials. They may scratch the plastic parts and corrode the electronic circuits.
- Do not subject the product to excessive force, shock, dust, temperature, or humidity, which may result in malfunctions, shorter lifespan, damaged batteries, and damaged parts.
- Do not tamper with the product's internal components. Doing so will invalidate the warranty and may cause damage. The product contains no user-serviceable parts.
- Use only fresh batteries. Do not mix new and old batteries.
- Read the user's manual thoroughly before operating the product.

Specifications

Radio Frequency: 433 MHz

RF Reception range: 100 (30 m)

Rainfall

1h/24h/yesterday range: 0 to 78.73 inch (0 to 1999.9 mm)
Last week/ last month range: 0 to 787.3 inch (0 to 19999 mm)
Resolution: 0.03 inch (0.6578 mm)
Accuracy: +/- 5% +/- 0.03 inch (+/-5%mm +/-0.6875)
Transmitting Interval: 183 seconds
Power: 2 x UM-3 or AA 1.5V battery
Battery life (alkaline): 2 years
Weight (without batteries):10.24oz (290g)
Dimensions: 6.49(L) x 6.89(H) x 4.72(D) inches / 165(L) x 175(H) x 119(D) mm

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.
Warning: Changes or modification to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment had been tested and found to comply with the limits for a Class B Digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment, installed and used in accordance with the instructions, may cause harmful interference to radio communications.
There is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to improve or correct turning the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

DECLARATION OF CONFORMITY

We
Name: Hideki Electronics, Inc.
Address: 7865 SW Mohawk, Tualatin, OR 97062
Telephone No.: 1-503-612-8395
declare that the product

Product No.: TS906
Product Name: Remote Rain Gauge for Professional Weather Station TE923W
Manufacturer: Hideki Electronics Ltd.
Address: Unit 2304-06, 23/F Riley House, 88 Lei Muk Road, Kwai Chung, New Territories, Hong Kong
is in conformity with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
This device may not cause harmful interference.
This device must accept any interference received, including interference that may cause undesired operation.
The information above is not to be used as a contact for support or sales. Please call our customer service hotline (refer to the Standard Warranty Information) for all injuries instead.

STANDARD WARRANTY INFORMATION

This product is warranted from manufacturing defects for one year from the date of retail purchase. It does not cover damages or wear resulting from accident, misuse, abuse, commercial use, or unauthorized adjustment and repair.
Note that online product registration is required to ensure valid warranty protection.
To register your product, go to our Company website at:
www.honeywellweatherstations.com. Click Online Product Registration under the Customer Service menu.
Should you require assistance with this product and its operation, please contact our Customer Service Hotline 1(866) 443 3543.
Please direct all returns to the place of the original purchase. Should this not be possible, contact Hideki Customer Service Hotline for assistance and to obtain a Return Merchandise Authorization (RMA). Returns without a return authorization will be refused. Please retain your original receipt as you may be asked to provide a copy for proof of purchase.
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All user manual contents and information are subject to change.

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